Charles A. King Trust
Postdoctoral Research Fellowship Program

BANK OF AMERICA

Bank of America, N.A.,
Melissa MacGillivray Dane, and Susan Monahan, Co-Trustees

### Guidelines for ### BASIC SCIENCE APPLICANTS	**Online Application Deadline:** **Wednesday, March 2, 2022** **12:00 P.M., U.S. Eastern Time**

AWARD PERIOD
October 1, 2022 – September 30, 2024

AWARD AMOUNT
Two-year grants currently range from $111,520 to $130,072 total, inclusive of a $2,000 annual expense allowance.

PROGRAM OVERVIEW
Established in 1936, the Charles A. King Trust was created to "support and promote the investigation of human disease and the alleviation of human suffering through improved treatment." In keeping with these principles, the King Trust today supports postdoctoral fellows in the basic sciences and clinical and health services research through the Charles A. King Trust Postdoctoral Fellowship Program.

The primary goal of the Charles A. King Trust Postdoctoral Fellowship Program is to support research that focuses on the causes of human disease with the mission of improving its treatment. To meet this goal the Program provides vital support to prepare postdoctoral fellows for academic careers as successful independent investigators in biomedical research.

The King Basic Science Award Program supports scientists in the mid to late stages of their postdoctoral research training in basic science research. Basic Science research funded by this program has contributed to knowledge that has significantly impacted biomedical advances and contributed to the subsequent development of an impressive host of therapeutic interventions spanning the entire range of human disease categories. Please note, clinical research proposals involving human studies are **not allowed** and should be directed towards the King Trust Clinical and Health Services Research Fellowship Program. For questions regarding basic versus clinical research, please visit: [www.hria.org/tmf/KingBasic and](www.hria.org/tmf/KingBasic) refer to the Frequently Asked Questions document.

According to the National Academy of Science and Medicine, the cultural diversity of a nation's workforce, including science, technology, engineering, and mathematics (STEM) is a key factor in its ability to innovate and compete in a global economy. To promote and enable diversity in biomedical research, the King Trust is committed to awarding researchers of all backgrounds, including racial/ethnic

groups that are underrepresented in science. The National Science Foundation and the National Institutes of Health have shown that individuals from the following groups are underrepresented in science: Blacks or African Americans, Hispanics or Latinos, American Indians or Alaskan Natives, Native Hawaiians and other Pacific Islanders. Applicants from these groups are encouraged to apply. In addition, applicants and mentors are encouraged to speak to their commitment to diversity, equity, and inclusion within the application.

Although the majority of funding comes from the Charles A. King Trust, other donors and private foundations also contribute to this Program. <u>Proposals focused on cancer or blindness (not visual impairment), are highly encouraged</u> due to the availability of dedicated fellowships supported by the generous funding contributed respectively from the Sara Elizabeth O'Brien Trust, Bank of America, N.A., Trustee, and the Simeon J. Fortin Charitable Foundation, Bank of America, N.A., Trustee.

Bank of America, N.A., serves as the Co-Trustee of the Charles A. King Trust. U.S. Trust, Bank of America Private Wealth Management works with The Medical Foundation at Health Resources in Action (HRiA), to select the most qualified applicants. HRiA is a nonprofit organization in Boston that advances public health and medical research. The Medical Foundation supports both gender and ethnic diversity across all of its grant programs.

Historical Statistics	2017	2018	2019	2020	2021
# of Basic Science Applications	67	78	42	52	77
# of Basic Science Awards	13	16	7	14	10

ELIGIBILITY REQUIREMENTS

The King Fellowship supports research disciplines across all biomedical fields, in keeping with the Foundation's mission. Proposals in the basic sciences seek to increase our understanding of the underlying normal and abnormal biological processes relevant to human health and disease.

Basic Science Applicants <u>must meet</u> the following eligibility requirements by the <u>dates indicated</u>:
1. By the funding start date (October 1, 2022), hold a Ph.D., M.D., D.M.D., M.D./Ph.D., or comparable degree and work in an academic or medical research institution in the state of Massachusetts;
2. By the funding start date, must have completed at least three (3) years and no more than six (6) years of full-time <u>postdoctoral research experience</u> (**see definition below**). Eligible applicants will have begun their full-time postdoctoral work between October 1, 2016 and September 30, 2019;
   - **Postdoctoral research experience is defined** as full-time employment, after receiving one's first doctoral degree, as a postdoctoral fellow in a research laboratory or similar professional experience (e.g. positions in biotechnology and pharmaceutical industries) five full days each week. All postdoctoral research experience completed domestically and abroad is counted.
3. By the funding start date, must commit at least 90% time to research;
4. By the application deadline (March 2, 2022), the applicant must have **at least one primary, peer reviewed research article from their postdoctoral work. Articles in press or submitted for review, should be publicly available as a preprint (e.g. BioRxiv).**

5. By the funding start date, apply under the guidance of a Mentor who is an established investigator with an active research program. **Mentors are expected to be involved** in the planning, execution, and supervision of the proposed research;
6. Only one applicant per Mentor may apply per application cycle; there are no institutional limitations on the number of applicants who may submit applications;
7. United States citizenship is not required; visa documentation is not required.

NOTE: All applicants must exclude any interrupted research time for family or medical leave or for other reasons (including COVID-19), from the total full-time employment. For M.D. applicants, periods of post-graduate clinical training are also excluded. However, part-time employment may be cumulative towards these eligibility requirements and must be documented by the Mentor.

MENTOR'S LETTER OF SUPPORT
All Mentors **must confirm** the following within their Letter of Support:
- The applicant meets all eligibility requirements as stated in the Guidelines.
- Include plans for mentoring the applicant in support of the proposed project and the applicant's continued progress towards becoming an independent investigator.
- If applicable, Mentors must also confirm an applicant's degree(s) obtained outside the U.S. are equivalent to the M.D., D.M.D., Ph.D., or other doctoral degree.
- If applicable, anything other than full-time experience in fulfillment of these requirements must also be documented.
- See additional detail in the Instructions for Application Submission.

CAREER DEVELOPMENT AWARDS
Applicants **may not** hold a concurrent Career Development Award, including an NIH K, F, or KL2 Award, or equivalent, at the time of application or award. **It is the responsibility of applicants/awardees** to contact The Medical Foundation regarding the following:
- Applicants must withdraw their proposals if they receive a Career Development Award or equivalent before the funding start date of October 1, 2022;
- Awardees must relinquish their award if they receive a Career Development Award or equivalent, and/or a faculty appointment, after the fellowship has been awarded. All outstanding Fellowship funds must also be returned.

SELECTION CRITERIA
It is important to note that these are highly competitive awards. **Prior to applying, we recommend that applicants consult with former awardees and faculty advisors to determine if they are likely to be competitive for this award program.** Visit https://hria.org/tmf/KingBasic/ to view a list of past awardees.

The criteria used by the reviewers to evaluate applications include:
- **Applicant's** demonstrated competency and potential for an independent career in research that will contribute to the investigation of human disease;,
- The applicant's commitment to fostering a diverse, equitable, and inclusive environment
- Project will contribute to the applicant's professional training and growth;
- Qualifications of the **Mentor** and the degree of commitment to supervise and train the Applicant during the research period and strength of their Letter of Support;

- Letters of Recommendation that attest to the applicant's qualifications, their potential to become an independent investigator, and the importance of the proposed research;
- Strength of publications relevant to the field of study;
- Originality, impact and creativity;
- **Research Proposal**:
  - Hypothesis is novel and/or builds on current knowledge;
  - Proposal reviews the relevant literature;
  - Objectives are well conceived, realistic, and important;
  - Research methodology, data collection, and analytical plan are feasible and appropriate to the proposal's aims;

NOTIFICATION TO APPLICANTS

Applicants will be notified by email in fall 2022 following the determination of available funds by the Charles A. King Trust and other donors. Due to the volume of submissions, proposal critiques are not provided to successful or unsuccessful applicants nor is applicant ranking.

RELATED DOCUMENTS

Download and review the following items: www.hria.org/tmf/KingBasic
- **Terms of the Award** - information on use of the grant funds, payment schedule, reporting schedule and other Award Recipient and Institutional requirements.
- **Frequently Asked Questions**
- **Application Forms**

Continue to the following page for Application Submission Instructions

INSTRUCTIONS FOR APPLICATION SUBMISSION

> **Online Application Deadline:**
> **Wednesday, March 2, 2022**
> **12:00 P.M., U.S. Eastern Time**

Please use the following links to access the Online Application:

- Begin a New Online Application:
  https://www.grantrequest.com/SID_738?SA=SNA&FID=35057

- Return to a Saved Online Application:
  https://www.GrantRequest.com/SID_738?SA=AM

The following sections are required within the Online Application:

1. Institution's Tax ID Number
2. Eligibility Quiz
3. Applicant Data: Institution, contact and educational background information
4. Research Project: Project Title, Keywords, Project Summary, Non-technical Summary, and Mentor information
5. Institutional Contact Information
6. Statement of Mentor's Commitment to Diversity, Equity, and Inclusion: Please ask the mentor to include a description of the mentor and institution's commitment to improving diversity, equity and inclusion. This section should be no longer than 250 words. The purpose of this collection is to learn of the current practices of institutions and mentors that support King Trust Fellows and will not be used as part of the review criteria.
7. Mentor/Recommenders: Online request form for the confidential Letters of Support and Recommendation. Please see further instructions below (A).
8. Attachments: A PDF document must be uploaded to the Online Application. Please see further instructions below (B).

A. Letters of Support and Recommendation:

THREE confidential letters are required and must be submitted through the online system. They must be from 1) your Mentor (Letter of Support), 2) your Thesis Advisor, Residency Director, or equivalent who can comment on your training, and 3) your choice.

It is the responsibility of the Applicant to obtain these three (3) letters prior to the Online Application deadline. **Members of the Review Committees give considerable weight to these letters.** Please notify your Recommenders early on in the application process to allow them sufficient time to prepare your letter. It is advisable that you begin an online application immediately, enter the names and emails of your Mentor and two recommenders and then send each the email request from the online system. For additional instruction regarding the **monitoring and upload of letters**, please see the last page of this document.

Only one Mentor's Letter is allowed. If applicable, any co-mentor letter must be one of the two additional recommendation letters. Collaboration letters will not be accepted. Updated letters submitted after the deadline will not be accepted.

We are all working to reduce bias, and letters are sometimes biased in ways that systematically disadvantage people based on race and/or gender. As letters are being prepared, we have provided a table that provides suggestions for letter writing to help avoid bias as modeled after the University of Arizona's guidance on this topic.

Mention research & publications	Letters of reference for men are more likely to mention publications and to have multiple references to research. Put these critical accomplishments in every letter.
Don't stop too soon	On average, letters for women are shorter and more likely to make a minimal assurance ('she can do the job') rather than a ringing endorsement ('she is the best for the job').
We all share bias	Unconscious gender bias isn't exclusively a male problem. Research shows that women are as susceptible to these common pitfalls as men.
Keep it professional	Avoid gratuitous references to personal life and make sure you use formal titles and surnames for both men and women.
Stay away from stereotypes	Do not invoke negative stereotypes even indirectly ('she is not emotional'). Be careful evoking even positive gender stereotypes ('caring', 'compassionate', 'helpful'), as even these can potentially hurt a candidate.
Be careful raising doubt	Honest letters are crucial, but negative or irrelevant comments, such as 'challenging personality' or 'I have confidence that she will become better than average' are twice as common in letters for female applicants. Don't add doubt unless it is strictly necessary.

1. Instructions for Mentor's Letter of Support (maximum of four pages):
- Describe the Applicant's qualifications and provide a clear mentorship plan (included within the four-page maximum) stating why the mentor has taken on this role for the applicant and how the Mentor will be involved in the planning, execution, and supervision of the proposed research, and use their professional and scientific knowledge to support the Applicant to further develop their independence and promote their scientific career. The mentorship plan must also specify the Mentor's allocation of time and effort in training and support for the Applicant and the proposed research.
- A brief description of the research facilities and equipment available to the Applicant should also be included.
- Confirm the number of years of full-time postdoctoral experience that the Applicant will have completed by October 1, 2022. Please explain if other than full-time experience is being considered in fulfillment of these requirements.

- **Publication and publication history will be used as criteria to judge the productivity of the Applicant. The Mentor <u>must comment</u> on the applicant's publication record.**
- Confirm the Applicant can commit at least 90% time to research and has completed at least three (3) years and no more than six (6) years of full-time postdoctoral research experience.
- Confirm degrees obtained outside the United States are equivalent to the Ph.D., M.D., D.M.D., or other doctoral degree.

2. Instructions for Letters of Recommendation (maximum of four pages per letter):
- Recommenders should describe their association with the Applicant and comment on the following: the Applicant's scientific background; research ability and potential; self-reliance and independence; and critical thinking skills.
- For Ph.D. applicants, a letter of recommendation is required from the thesis advisor (if the thesis advisor is unable to provide a letter, the Applicant must provide an explanation in the PDF upload).
- For M.D. applicants, instead of a thesis advisor letter, a letter of recommendation is required from the Residency Director or Clinical Fellowship Director who can comment on your training and how they perceive your future potential.

B. **<u>Attachment Instructions for PDF</u>**:
   Documents listed below in items #1 – 7 must be combined into ONE PDF document for online upload. Templates for #1-4 are required for the uploaded PDF document and are located at www.hria.org/tmf/KingBasic.

1. **Application Face Sheet (template provided)**: The Face Sheet must be completed and signed by the Applicant, Mentor, and the Office of Sponsored Programs or the Institutional Officer administratively responsible for oversight of the project. The signatures of the Applicant and Mentor on the Face Sheet will confirm responsibility for obtaining any required human subjects (IRB), animal use (IACUC), or institutional equivalent approvals. In addition, the Mentor's and Institutional Officer's signatures will confirm that **all eligibility requirements have been met.** Endorsement by the Institutional Officer confirms that the Institution will commit to appropriate oversight if the project is funded. Once all signatures have been obtained, the Face Sheet should be scanned and used as page 1 of the uploaded document. Applicants should allow enough time to gather the required signatures for submission. This document will not be accepted after the deadline.

2. **Table of Contents (template provided)**: Follow the Table of Contents and number pages sequentially.

3. **Project Summary (template provided)**: Please include a 300-word summary stating the project's broad, long-term objectives and specific aims. Use the same Project Summary in both the online form and PDF document.

4. **Biosketch of Applicant (maximum of six pages, template provided)**: Follow the instructions included in the biosketch template. These instructions should be deleted prior to submission. Biosketch sections up through Section C should not exceed 6 pages.

5. **Research Proposal (maximum of six pages, excluding references cited). Within the page limit, include these sections in the order listed below:**
    a. Background;
    b. Specific aims;
    c. Preliminary data (if available);
    d. Research design, experimental methods and analytical plan;
    e. Research limitations and/or potential pitfalls;

    Research Proposal Format:
    - Include at the top of each page in the margin, the Applicant's full name, degree(s) and Institution.
    - Use Arial 11 font size in the text of the research proposal section.
    - Any figures, graphs, tables or pictures must be included within the six pages. For these visuals, the minimum is an 8-point font size.
    - Use single spacing within paragraphs, double spacing between paragraphs and at least half-inch margins on all four sides.
    - Appendices are not permitted.

6. **Mentor's Biosketch and List of Trainees (maximum of six pages):**
    Use the latest NIH biosketch, incorporating the items below:
    a. Personal Statement
    b. Positions and Honors
    c. Contributions to Science
    d. Research Support *(Current & Pending)*
    e. Up to additional one-page listing of previous trainees with their current positions (included in page count)

7. **Thesis Advisor Explanation (only applicable if applicant has a Ph.D):** If the thesis advisor is unable to write a Letter of Recommendation, please include a brief explanation of why and who will take their place.

Please note: Out of fairness to applicants who adhere to the guidelines, applications that do not conform to the stated application procedures or that contain more than the specified number of pages or letters will be rejected. Applications that are not properly organized will be rejected.

ADDITIONAL INSTRUCTION: MONITORING AND UPLOAD OF LETTERS

Instructions for Applicants to send an email request to your Mentor/Recommender:
Within the online application form, on the "Recommenders" page:
- Input the Mentor and two Recommender's names and emails.
- Check the "Send Email" box for the specific individual you are contacting. (Note: the form default is to have all of the Send Email boxes checked off so be careful to <u>uncheck the boxes for the individuals you are not contacting</u>).
- Click on the "Send" button.
- This will bring you to the "Notify Selected Recommenders" page:
  - Draft your email: customize the subject an email message for each individual contact.
  - Click on the "Write Email & Send" button. This will send the email to your selected mentor/recommender(s). Included in the sent email is an automatically generated website link that the Mentor/Recommender **must use** to upload their letter.
  - After sending your email, you will be redirected back to the "Recommenders" page.

Tips:
- Send Mentors/Recommenders the Guidelines, noting the specific content instructions for the Letters.
- The letter of support must be in a PDF format and official letterhead is preferred. Do not password-protect the letters. All letters must be written in English. Before upload, PDFs should be titled, ApplicantLastNameFirstName(MentorLastName).
- Notify your mentor/recommenders to expect the email request from you. If they do not receive the email(s) within the same day as the request, they should check their junk email folder.
- The mentor/recommenders must use the link provided in the email request and log-in with the email address that the Applicant provided.
- If the mentor/recommender is unable to find the email with the link or if you want to change the Recommender, use the My Account page to access your application, remove that request and restart the process.
- If a mentor is a recommender for a different applicant, please advise them to confirm they are uploading the correct letter to the correct application.
- When the mentor/recommender submits their letter, it will become a part of your application. You can view the status of your online recommendations each time you log into your My Accounts page (https://www.grantrequest.com/SID_738/?SA=AM). It is the applicant's responsibility to monitor the status of the online recommendations prior to the application deadline.
- Only one Mentor's Letter is allowed. If applicable, any co-mentor letters should be one of the two additional recommendation letters.
- Applicants will not be able to complete the application process if the letters are not uploaded.
- Letters will not be accepted after the deadline.
- Paper copies of the letters of support/recommendation will not be accepted.